

DENON

DVD Video Player

DVD-2800

Supports Ultra-High-Quality Progressive Scan Video

The DVD-2800 is endowed with PureProgressive technology to unleash the full impact of DVD-Video picture quality. This DVD video player from DENON is the first to use the Progressive Converter developed by Silicon Image, Inc., ensuring greater accuracy and speed in I/P conversion. The DVD-2800 also uses a 54-MHz, 12-bit video D/A converter to faithfully preserve the delicate low-level signals during D/A conversion. With these advanced video image technologies, the DVD-2800 is able to reproduce high-quality pictures on Progressive-compliant monitors and projectors. The audio circuitry masterfully complements the superior picture quality with its 96-kHz, 24-bit D/A converter, HDCD decoder, and parts strictly selected for high sound quality, providing you with stunning sonic transparency and power.



■ PAL/NTSC Conversion Output

The DVD-2800 is capable of reading discs recorded in PAL or NTSC format and also outputting PAL or NTSC signals. A clear, flicker-free picture is thus possible when the DVD-2800 is connected to a TV monitor that supports NTSC Progressive.

■ PureProgressive Circuit (NTSC Conversion Output Only)

The DVD-2800 is the first DVD video player to support Silicon Image's Progressive Converter, capable of the highest standard of I/P conversion in the industry.

High-speed processing: This Progressive Converter is capable of processing 6 giga operations per second, giving reality to the following high performance.

Moving picture detection: Since PureProgressive is also adept at 2:3 pull-down detection, which converts Film recording mode to TV/Video playback mode, and detecting Video mode signals of DVD-Video and other moving picture formats, PureProgressive is capable of reproducing DVD-Video discs containing both Film mode and Video mode signals, as well as high picture quality Progressive video sources, while avoiding the flickering caused by detection delays. In detecting moving video signals, the conventional Progressive method performs detection in single frame units, while PureProgressive stores 4 fields of video signals in a 64-Mbit SDRAM buffer, enabling the detection of single-pixel units to achieve greater precision in discriminating between moving and still pictures.

2:3 pull-down detection: In 2:3 pull-down processing which converts 24-fps Film mode into 60-fps TV/Video mode, there are cases in which 2:3 pull-down sync signals are not in sync. The PureProgressive converter thus quickly detects the non-sequential points and performs appropriate corrective measures at high speed to minimize picture flickering.

■ Highest resolution Analog Devices 54-MHz, 12-bit, Video D/A Conversion System

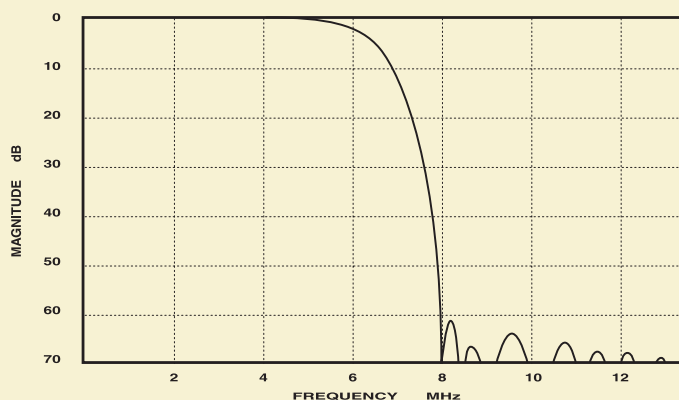
The DVD-2800 employs a 54-MHz, 12-bit video D/A converter. This video D/A converter performs on Progressive form, and by processing the Y signal and Pb/Pr signals at resolutions of 12 and 11 bits, respectively, PureProgressive is able to faithfully reproduce extremely low-level signals, delivering a delicate yet clear video image.

When interlaced video is detected, DVD-2800 uses the 27-MHz, 10-bit video D/A converter, so that with either video format, delicate nuances are D/A converted with optimum accuracy.

■ Super Sub Alias Filter

The DVD-2800 uses a Super Sub Alias Filter for the digital filter to optimize picture quality. This filter achieves attenuation characteristics of -3 dB in the ultra-high frequency band when the horizontal image is 6.25 MHz. Even at 8.25 MHz, the apparent outer limit of DVD-Video, the attenuation characteristic secured is above -60 dB, ensuring an ultra-high picture quality with superior horizontal line resolution.

Filter Characteristic



■ High-performance Output Signal Switching Relay

The DVD-2800 is equipped with 1 set of Component video outputs for both Progressive signal (Y, Pb, Pr) and Interlaced signal (Y, Cb, Cr) output. Wideband relay switching is employed when switching between Progressive and Interlaced Output, for optimum picture quality in either mode.

■ Video Controls

The DVD-2800 provides 5 video adjustment controls---Contrast, Sharpness, Brightness, Gamma (to enhance gradation for video programs with predominantly dark Progressive Scan images), and Hue (for Interlaced images only)---which let you adjust the video images to suit your taste.

■ 24-bit, 96-kHz Audio D/A Converter

The DVD-2800 uses a highly accurate multi-bit Sigma Delta D/A converter with superior dynamic range and S/N characteristics. This converter provides plenty of support for the demanding 24-bit, 96-kHz sampling signals of the DVD-Video format. The incorporation of a differential circuit in the output stage and other features of the D/A converter ensure that playback sound is of the highest quality possible, the normal expectation from DENON's acclaimed digital technology.

■ HDCD Decoder

HDCD is a digital recording technology, compatible with the conventional CD format, that significantly reduces distortion during recording to expand the dynamic range and realize high resolution. The HDCD decoder allows the DVD-2800 to play discs that have been recorded in HDCD format and to bring out the superior sonic performance from these discs. Combined with DENON's advanced audio technology, the DVD-2800 masterfully reproduces HDCD's rich dynamic range and beautiful sound quality.

■ CD-R/RW (audio/MP3) Playback (*1)

Both CD-R and CD-RW discs can be played in the DVD-2800.

■ MP3 Playback (*1)

The DVD-2800 also plays MP3 files downloaded from the Internet and other sources. Simply record these files onto a CD-R/RW disc via your computer, then play the disc in the DVD-2800.

■ PCM, Dolby Digital and DTS Digital Output

■ 24 bit/96 kHz PCM Digital Output Capability

■ Virtual Surround Mode (*2)

Surround yourself with sensational 3D soundfield envelopment using just one pair of speakers. The DVD-2800's Virtual Surround mode provides a dramatic psychoacoustic surround sound effect, using two speakers with Dolby Digital 5.1 encoded sources.

■ Highly Rigid Chassis and Hybrid Loader Mechanism

The DVD-2800 incorporates a center mechanism mount that is structurally very stable, and the mechanism's cover ensures that vibration from the drive does not influence signal circuitry. The DVD-2800's rigid chassis is constructed of a 15-mm thick front panel, a 1.6-mm thick drive mechanism, and a 1-mm thick top cover, 1.2-mm thick main chassis to thoroughly suppress internal and external vibration and preserve signal integrity. The disc loader features a special hybrid construction of molded plastic and metal that further absorbs vibration for completely stable disc playback.

■ Double-speed Drive System

The DVD-2800 employs a 2x drive system that drives at 4x when the loaded disc is a CD. This unit is also equipped with a 4 MB buffer memory to ensure that both picture and sound are played without interruption when the DVD disc shifts from layer 1 to layer 2, or in the rare event of a pickup dropout.

■ On-screen Display

■ Gold Plated Audio and Video Output Terminals

■ Other Versatile Features

- Multi-Angle Function (*3)
- Multi-Sound Function (*3)
- Multi-Subtitle (*3)
- Playback Memory Function
- Energy-Saving During Standby
- Auto Power OFF

*1 Discs that have been poorly finalized following recording may be only partially playable or not playable at all.

*2 For discs recorded in Dolby Digital only.

*3 The DVD software needs to have this feature.

Specifications

■ Video Section

Signal system	PAL/NTSC
Disc played	DVD Video, Video CD, Music CD, CD-R/RW (audio), CD-R/RW (MP3)
Video outputs	Composite Video Output: 1.0 Vp-p (with 75 ohms load) S-Video Output: Y; 1.0 Vp-p (with 75 ohms load), C; 0.3 Vp-p Component Video Output: Y, Cb/Pb, Cr/Pr: Y; 1.0 Vp-p (with 75 ohms load), Cb/Pb; 0.7 Vp-p (with 75 ohms load), Cr/Pr; 0.7 Vp-p (with 75 ohms load) RGB Output (AV1): 0.7 Vp-p (with 75 ohms load)

■ Audio Section

Audio outputs	Analog Output (L/R): 2.0 Vrms 1 Set Optical Digital Output 1 Set Coaxial Digital Output
Signal-to-noise ratio	115 dB (DVD/CD)
Dynamic range	108/100 dB (DVD/CD)
Total harmonic distortion	0.0018 %

■ General

Power supply	AC 230 V, 50 Hz
Power consumption	19 W
Dimensions	434 (W) x 133 (H) x 330 (D) mm
Weight	7.0 kg

Black version is available.



*Design and specifications are subject to change without notice.

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*DVDPureProgressive™ Technology brought to you by Silicon Image, Inc.

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